STN

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=> s l50 and py<2003
L51           5 L50 AND PY<2003

=> d 1-5 ibib kwic

L51  ANSWER 1 OF 5  USPATFULL on STN
ACCESSION NUMBER:        2002:199103  USPATFULL
TITLE:                   Methods of reducing papillomavirus infection using
                         immunomodulatory polynucleotide sequences
INVENTOR(S):             Nest, Gary Van, Martinez, CA, UNITED STATES
                         Eiden, Joseph J., JR., Danville, CA, UNITED STATES

                              NUMBER         KIND    DATE
                         ---------------- ------ --------
PATENT INFORMATION:      US 2002107212      A1   20020808            <--
APPLICATION INFO.:       US 2001-802445     A1   20010309  (9)

                                NUMBER         DATE
                         ------------------ --------
PRIORITY INFORMATION:    US 2000-188265P    20000310 (60)
DOCUMENT TYPE:           Utility
FILE SEGMENT:            APPLICATION
LEGAL REPRESENTATIVE:    Karen R. Zachow, Morrison & Foerster LLP, 755 Page Mill
                         Road, Palo Alto, CA, 94304-1018
NUMBER OF CLAIMS:        22
EXEMPLARY CLAIM:         1
NUMBER OF DRAWINGS:      3 Drawing Page(s)
LINE COUNT:              1604
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PI     US 2002107212       A1  20020808                              <--
DETD   [0122] ISS polynucleotide formulations may contain additional components
       such as salts, buffers, bulking agents, osmolytes,
       antioxidants, detergents, surfactants and other pharmaceutically-
       acceptable excipients as are known in the art. Generally, liquid ISS
       polynucleotide formulations made in. . .
DETD   [0130] Nasopharyngeal and pulmonary routes of administration include,
       but are not limited to, intranasal, inhalation, transbronchial
       and transalveolar routes. The ISS-containing polynucleotide may thus be
       administered by inhalation of aerosols, atomized liquids or
       powders. Devices suitable for administration by
       inhalation of ISS-containing compositions include, but are not
       limited to, nebulizers, atomizers, vaporizers, and metered-dose
       inhalers. Nebulizers, atomizers, vaporizers and metered-dose
       inhalers filled with or employing reservoirs containing
       formulations comprising the ISS-containing polynucleotide(s) are among a
       variety of devices suitable for use in inhalation
       delivery of the ISS-containing polynucleotide(s). Other methods of
       delivering to respiratory mucosa include delivery of liquid
       formulations, such as by. . .
DETD   . . . administration may be by bolus or infusion administration. For
       SC administration, administration may be by bolus, infusion or by
       implantable device, such as an implantable minipump (e.g.,
       osmotic or mechanical minipump) or slow release implant. The ISS
       polynucleotide(s) may also be delivered in a slow release formulation
       adapted for IV, IP, IM, ID or SC administration. Administration by
       inhalation is preferably accomplished in discrete doses (e.g.,
       via a metered dose inhaler), although delivery similar to an
       infusion may be accomplished through use of a nebulizer. Administration
       via the transdermal and transmucosal. . .
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DETD . . . in an ointment for topical formulation in appropriate packaging. Also contemplated are packages for use in combination with a specific ***device***, such as an ***inhaler***, nasal administration ***device*** (e.g., an atomizer), transdermal administration ***device***, or an infusion ***device*** such as a minipump.

L51 ANSWER 2 OF 5 USPATFULL on STN

ACCESSION NUMBER:	2002:186102 USPATFULL			
TITLE:	Compounds and methods for the treatment of airway diseases and for the delivery of airway drugs			
INVENTOR(S):	Boucher, Richard C., JR., Chapel Hill, NC, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002099023	A1	20020725	<--
APPLICATION INFO.:	US 2002-87355	A1	20020301 (10)	
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-465429, filed on 21 Dec 1999, PENDING			
	NUMBER		DATE	
PRIORITY INFORMATION:	US 1999-137991P		19990607 (60)	
	US 1998-113785P		19981222 (60)	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	MYERS BIGEL SIBLEY & SAJOVEC, PO BOX 37428, RALEIGH, NC, 27627			
NUMBER OF CLAIMS:	30			
EXEMPLARY CLAIM:	1			
LINE COUNT:	627			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

PI US 2002099023 A1 20020725 <--

AB . . . obstructive airway diseases are treated by administering an osmotically active compound such as a salt, sugar, sugar alcohol, or organic ***osmolyte*** to the afflicted airway surface. The compound may be administered as a liquid or dry powder aerosol formulation. Diseases that. . .

SUMM . . . a non-absorbable, osmotically active compound (hereinafter referred to as an "active compound") such as a salt, sugar, sugar alcohol, organic ***osmolyte***, or other osmotically active compound to an airway surface of the subject in an amount effective to increase the volume. . .

DETD [0018] Active compounds of the present invention are molecules or compounds that are osmotically active (i.e., are "***osmolytes***"). "Osmotically active" compounds of the present invention are membrane-impermeable (i.e., essentially non-absorbable) on the airway or pulmonary epithelial surface. The. . . the bronchi and bronchioles, alveolar surfaces, and nasal and sinus surfaces. Active compounds of the present invention may be ionic ***osmolytes*** (i.e., salts), or may be non-ionic ***osmolytes*** (i.e., sugars, sugar alcohols, and organic ***osmolytes***). It is specifically intended that both racemic forms of the active compounds that are racemic in nature are included in. . .

DETD [0019] Active compounds useful in the present invention that are ionic ***osmolytes*** include any salt consisting of a pharmaceutically acceptable anion and a pharmaceutically acceptable cation. Preferably, either (or both) of the. . .

DETD [0023] Active compounds of the present invention also include non-ionic

osmolytes such as sugars, sugar-alcohols, and organic *osmolytes*. Sugars and sugar-alcohols useful in the practice of the present invention include but are not limited to 3-carbon sugars (e.g.,. . . reduced forms of sugar/sugar alcohols (e.g., dulcitol, arabitol) are accordingly active compounds of the present invention. As with the ionic *osmolytes* of the present invention, as between the dextrorotatory (D) form and the levorotatory (L) form of an active compound of. . .

DETD [0024] Active compounds of the present invention additionally include the family of non-ionic *osmolytes* termed "organic *osmolytes*." The term "organic *osmolytes*" is generally used to refer to molecules used to control intracellular osmolality in the kidney. See e.g., J. S. Handler. . . the inventor does not wish to be bound to any particular theory of the invention, it appears that these organic *osmolytes* are useful in controlling extracellular volume on the airway/pulmonary surface. Organic *osmolytes* useful as active compounds in the present invention include but are not limited to three major classes of compounds: polyols (polyhydric alcohols), methylamines, and amino acids. The polyol organic *osmolytes* considered useful in the practice of Tilis invention include, but are not limited to, inositol, myo-inositol, and sorbitol. The methylamine organic *osmolytes* useful in the practice of the invention include, but are not limited to, choline, betaine, carnitine (L-, D- and DL forms), phosphorylcholine, lyso-phosphorylcholine, glycerophosphorylcholine, creatine, and creatine phosphate. The amino acid organic *osmolytes* of the invention include, but are not limited to, the D- and L forms of glycine, alanine, glutamine, glutamate, aspartate, proline and taurine. Additional *osmolytes* useful in the practice of the invention include tihulose and sarcosine. Mammalian organic *osmolytes* are preferred, with human organic *osmolytes* being most preferred. However, certain organic *osmolytes* are of bacterial, yeast, and marine animal origin, and these compounds are also useful active compounds within the scope of. . .

DETD [0025] Under certain circumstances, an *osmolyte* precursor may be administered to the subject; accordingly, these compounds are also useful in the practice of the invention. The term "*osmolyte* precursor" as used herein refers to a compound which is converted into an *osmolyte* by a metabolic step, either catabolic or anabolic. The *osmolyte* precursors of this invention include, but are not limited to, glucose, glucose polymers, glycerol, choline, phosphatidylcholine, lyso-phosphatidylcholine and inorganic phosphates, which are precursors of polyols and methylamines. Precursors of amino acid *osmolytes* within the scope of this invention include proteins, peptides, and polyamino acids, which are hydrolyzed to yield *osmolyte* amino acids, and metabolic precursors which can be converted into *osmolyte* amino acids by a metabolic step such as transamination. For example, a precursor of the amino acid glutamine is poly-L-glutamine,. . .

DETD [0026] Also intended within the scope of this invention are chemically modified *osmolytes* or *osmolyte* precursors. Such chemical modifications involve linking to the *osmolyte* (or precursor) an additional chemical group which alters or enhances the effect of the *osmolyte* or *osmolyte* precursor (e.g., inhibits degradation of the *osmolyte* molecule). Such chemical modifications have been utilized with drugs or prodrugs and are known in the art. (See, for example,. . .

DETD . . . gelatin or plastic, which are either pierced or opened in situ and the powder delivered by air drawn through the *device* upon *inhalation* or by means of a manually-operated pump. The powder

employed in the insufflator consists either solely of the active ingredient. . . . comprises from 0.1 to 100% w/w of the formulation. A second type of illustrative aerosol generator comprises a metered dose ***inhaler***. Metered dose ***inhalers*** are pressurized aerosol dispensers, typically containing a suspension or solution formulation of the active ingredient in a liquified propellant. During use these ***devices*** discharge the formulation through a valve adapted to deliver a metered volume, typically from 10 to 150 µl, to produce. .

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CLM What is claimed is:

2. A method according to claim 1, wherein the osmotically active compound is an ionic ***osmolyte***.

3. A method according to claim 2, wherein the ionic ***osmolyte*** is a salt.

4. A method according to claim 1, wherein the osmotically active compound is a non-ionic ***osmolyte***.

5. A method according to claim 4, wherein the non-ionic ***osmolyte*** is a sugar.

6. A method according to claim 4, wherein the non-ionic ***osmolyte*** is a sugar alcohol.

7. A method according to claim 4, wherein the non-ionic ***osmolyte*** is an organic ***osmolyte***.

9. A method according to claim 4, wherein the non-ionic ***osmolyte*** is selected from the group consisting of glycerol, dihydroxyacetone erythrose, threose, and erythrulose, ribose, arabinose, xylose, lyxose, psicose, fructose, sorbose,. . .

10. A method according to claim 7, wherein the organic ***osmolyte*** is a polyol compound.

11. A method according to claim 7, wherein the organic ***osmolyte*** is a methylamine compound.

12. A method according to claim 7, wherein the organic ***osmolyte*** is an amino acid.

13. A method according to claim 7, wherein said organic ***osmolyte*** is selected from the group consisting of betaine, taurine, inositol, myoinositol, glycerophosphorylcholine, and tihulose.

L51 ANSWER 3 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2002:185291 USPATFULL

TITLE: Methods of suppressing hepatitis virus infection using immunomodulatory polynucleotide sequences

INVENTOR(S): Van Nest, Gary, Martinez, CA, UNITED STATES
Eiden, Joseph J., JR., Danville, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002098199	A1	20020725	<--
APPLICATION INFO.:	US 2001-802370	A1	20010309	(9)

	NUMBER	DATE

PRIORITY INFORMATION: US 2000-188301P 20000310 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Karen R. Zachow, Ph.D., Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1602
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PI US 2002098199 A1 20020725 <--
DETD [0110] ISS polynucleotide formulations may contain additional components such as salts, buffers, bulking agents, ***osmolytes***, antioxidants, detergents, surfactants and other pharmaceutically-acceptable excipients as are known in the art. Generally, liquid ISS polynucleotide formulations made in. . .
DETD [0116] Nasopharyngeal and pulmonary routes of administration include, but are not limited to, intranasal, ***inhalation***, transbronchial and transalveolar routes. The ISS-containing polynucleotide may thus be administered by ***inhalation*** of aerosols, atomized liquids or powders. ***Devices*** suitable for administration by ***inhalation*** of ISS-containing compositions include, but are not limited to, nebulizers, atomizers, vaporizers, and metered-dose ***inhalers***. Nebulizers, atomizers, vaporizers and metered-dose ***inhalers*** filled with or employing reservoirs containing formulations comprising the ISS-containing polynucleotide(s) are among a variety of ***devices*** suitable for use in ***inhalation*** delivery of the ISS-containing polynucleotide(s). Other methods of delivering to respiratory mucosa include delivery of liquid formulations, such as by. . .
DETD . . . administration may be by bolus or infusion administration. For SC administration, administration may be by bolus, infusion or by implantable ***device***, such as an implantable minipump (e.g., osmotic or mechanical minipump) or slow release implant. The ISS polynucleotide(s) may also be delivered in a slow release formulation adapted for IV, IP, IM, ID or SC administration. Administration by ***inhalation*** is preferably accomplished in discrete doses (e.g., via a metered dose ***inhaler***), although delivery similar to an infusion may be accomplished through use of a nebulizer. Administration via the transdermal and transmucosal. . .
DETD . . . supplied with a liquid formulation of the ISS-containing polynucleotide. Also contemplated are packages for use in combination with a specific ***device***, such as an ***inhaler***, nasal administration ***device*** (e.g., an atomizer) or an infusion ***device*** such as a minipump.

L51 ANSWER 4 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2002:48592 USPATFULL
TITLE: Methods of preventing and treating viral infections using immunomodulatory polynucleotide sequences
INVENTOR(S): Nest, Gary Van, Martinez, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002028784	A1	20020307	<--
APPLICATION INFO.:	US 2001-802685	A1	20010309	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-188302P	20000310 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Karen R. Zachow, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304-1018
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2175
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PI US 2002028784 A1 20020307 <--
DETD [0133] ISS polynucleotide formulations may contain additional components such as salts, buffers, bulking agents, ***osmolytes***, antioxidants, detergents, surfactants and other pharmaceutically-acceptable excipients as are known in the art. Generally, liquid ISS polynucleotide formulations made in. . .
DETD [0141] Nasopharyngeal and pulmonary routes of administration include, but are not limited to, intranasal, ***inhalation***, transbronchial and transalveolar routes. The ISS-containing polynucleotide may thus be administered by ***inhalation*** of aerosols, atomized liquids or powders. ***Devices*** suitable for administration by ***inhalation*** of ISS-containing compositions include, but are not limited to, nebulizers, atomizers, vaporizers, and metered-dose ***inhalers***. Nebulizers, atomizers, vaporizers and metered-dose ***inhalers*** filled with or employing reservoirs containing formulations comprising the ISS-containing polynucleotide(s) are among a variety of ***devices*** suitable for use in ***inhalation*** delivery of the ISS-containing polynucleotide(s). Other methods of delivering to respiratory mucosa include delivery of liquid formulations, such as by. . .
DETD . . . administration may be by bolus or infusion administration. For SC administration, administration may be by bolus, infusion, or by implantable ***device***, such as an implantable minipump (e.g., osmotic or mechanical minipump) or slow release implant. The ISS polynucleotide(s) may also be delivered in a slow release formulation adapted for IV, IP, IM, ID or SC administration. Administration by ***inhalation*** is preferably accomplished in discrete doses (e.g., via a metered dose ***inhaler***), although delivery similar to an infusion may be accomplished through use of a nebulizer. Administration via the transdermal and transmucosal. . .
DETD . . . in an ointment for topical formulation in appropriate packaging. Also contemplated are packages for use in combination with a specific ***device***, such as an ***inhaler***, nasal administration ***device*** (e.g., an atomizer) or an infusion ***device*** such as a minipump.

L51 ANSWER 5 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2001:218477 USPATFULL
TITLE: Methods of preventing and treating respiratory viral infection using immunomodulatory polynucleotide
INVENTOR(S): Van Nest, Gary, Martinez, CA, United States

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2001046967	A1	20011129	<--
APPLICATION INFO.:	US 2001-802686	A1	20010309	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-188583P	20000310	(60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1527
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PI US 2001046967 A1 20011129 <--

DETD [0100] ISS polynucleotide formulations may contain additional components such as salts, buffers, bulking agents, ***osmolytes***, antioxidants, detergents, surfactants and other pharmaceutically-acceptable excipients as are known in the art. Generally, liquid ISS polynucleotide formulations made in. . .

DETD . . . mucosa (such as nasal passages or lung). Nasopharyngeal and pulmonary routes of administration include, but are not limited to, intranasal, ***inhalation***, transbronchial and transalveolar routes. The ISS-containing polynucleotide may thus be administered by ***inhalation*** of aerosols, atomized liquids or powders. ***Devices*** suitable for administration by ***inhalation*** of ISS-containing compositions include, but are not limited to, nebulizers, atomizers, vaporizers, and metered-dose ***inhalers***. Nebulizers, atomizers, vaporizers and metered-dose ***inhalers*** filled with or employing reservoirs containing formulations comprising the ISS-containing polynucleotide(s) are among a variety of ***devices*** suitable for use in ***inhalation*** delivery of the ISS-containing polynucleotide(s). Other methods of delivering to respiratory mucosa include delivery of liquid formulations, such as by. . .

DETD . . . administration may be by bolus or infusion administration. For SC administration, administration may be by bolus, infusion or by implantable ***device***, such as an implantable minipump (e.g., osmotic or mechanical minipump) or slow release implant. The ISS polynucleotide(s) may also be delivered in a slow release formulation adapted for IV, IP, IM, ID or SC administration. Administration by ***inhalation*** is preferably accomplished in discrete doses (e.g., via a metered dose ***inhaler***), although delivery similar to an infusion may be accomplished through use of a nebulizer. Administration via the transdermal and transmucosal. . .

DETD . . . in an ointment for topical formulation in appropriate packaging. Also contemplated are packages for use in combination with a specific ***device***, such as an ***inhaler***, nasal administration ***device*** (e.g., an atomizer) or an infusion ***device*** such as a minipump or transdermal administration ***device***.

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> s inhal? (s) device
L48       20741 INHAL? (S) DEVICE

=> que l48 and osmolyie
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files.  For example, the EXPAND
command can only be used to look at the index in a file which has an
index.  Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> s l48 and osmolyie
L49           0 L48 AND OSMOLYIE

=> s l48 and osmolyte
L50          42 L48 AND OSMOLYTE

=> d 1-42 ti
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> d his

     (FILE 'HOME' ENTERED AT 21:23:21 ON 21 SEP 2007)

     FILE 'REGISTRY' ENTERED AT 21:25:27 ON 21 SEP 2007
                E OSMOLYTE ECTOINE/CN
                E ECTOINE/CN
                E HYDROXYECTOINE/CN
L1              1 S E2
                E ECTOINE/CN
L2              1 S E3
                E FIROIN/CN
L3              1 S E3
                E FIROIN-A/CN
L4              1 S E2
                E DIGLYCEROAL PHOSPHATE/CN
                E DIGLYCEROL PHOSPHATE/CN
                E PHOSPHODIGLYCEROL/CN
                E DIPHOSPHOGLYCERATE/CN
                E CYCLIC DIPHOSPHOGLYCERATE/CN

     FILE 'REGISTRY' ENTERED AT 21:33:30 ON 21 SEP 2007

     FILE 'CAPLUS, USPATFULL, USPATOLD, USPAT2' ENTERED AT 21:33:46 ON 21 SEP
     2007
L5            262 FILE CAPLUS
L6             45 FILE USPATFULL
L7              0 FILE USPATOLD
L8              9 FILE USPAT2
     TOTAL FOR ALL FILES
L9            316 S L1 OR L2 OR L3 OR L4
L10         34184 FILE CAPLUS
L11         38848 FILE USPATFULL
L12          2748 FILE USPATOLD
L13          5917 FILE USPAT2
     TOTAL FOR ALL FILES
L14         81697 S INHAL? (S) DEVICE OR NEBUL? OR INHALER
L15             1 FILE CAPLUS
L16             1 FILE USPATFULL
L17             0 FILE USPATOLD
L18             0 FILE USPAT2
     TOTAL FOR ALL FILES
L19             2 S L9 AND L14
L20         83419 FILE CAPLUS
L21         82805 FILE USPATFULL
L22          6176 FILE USPATOLD
L23         12303 FILE USPAT2
     TOTAL FOR ALL FILES
L24        184703 S INHAL? (S) DEVICE OR NEBUL? OR INHALER OR INHAL?
L25             1 FILE CAPLUS
L26             3 FILE USPATFULL
L27             0 FILE USPATOLD
L28             1 FILE USPAT2
     TOTAL FOR ALL FILES
L29             5 S L24 AND L9
L30             2 FILE CAPLUS
L31             1 FILE USPATFULL
L32             0 FILE USPATOLD
L33             0 FILE USPAT2
     TOTAL FOR ALL FILES
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L34             3 S L1 AND L2 AND L3 AND L4
L35             0 FILE CAPLUS
L36             0 FILE USPATFULL
L37             0 FILE USPATOLD
L38             0 FILE USPAT2
     TOTAL FOR ALL FILES
L39             0 S D HISL9
L40           259 FILE CAPLUS
L41          1026 FILE USPATFULL
L42            65 FILE USPATOLD
L43           115 FILE USPAT2
     TOTAL FOR ALL FILES
L44          1465 S D HIS
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